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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

MUI, CHRISTINE T

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/829,368	Applicant(s) GELBART, DANIEL	
	Examiner CHRISTINE T. MUI	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see REMARKS, filed 06 February 2009, with respect to the rejection(s) of claim(s) 1-15 under 35 USC 102(b) and 35 USC 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of EP 0 656 607 to Hoshino et al; USP 4,218,674 to Brosow et al.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3, 4, 8, 9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 0 656 607 to Hoshino et al (herein referred 'Hoshino').

4. Regarding claims 1, 3, 4 and 9, the reference Hoshino discloses a method for checking the authenticity of an object. The object is fabricated or made by a base material with a distribution of taggants in the base material itself, where it is randomly distributed in the base material and then is mapped in an article in a scanning region of the object. Information corresponding to the distribution of the taggants in the scanning region and other factors is enciphered and recorded in a code indicator section by means of a processing machine. The code indicator section is optically readable such

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as a bar code which is considered by the examiner to be a registration feature. Once the processing apparatus checks for the authenticity of the object by mapping the location of the taggants on the object of interest, the code that is produced is compared with data for the detection signal by means of a comparator. When the code and the data agree with each other, this concludes that the object is authentic (see Figure 19, column 3, lines 6-17, 27-34, 47-column 4, line 2, column 4, lines 20-43, column 8, lines 24-39, column 13, lines 16-40).

5. It is interpreted by the examiner that the taggant that is formed in the base material as seen in Figure 8, the taggant is combined with a first plastic, where the taggant is incorporated together with the base material, to form a tagged plastic and then molding the article from the tagged plastic to a second plastic through extrusion, is considered to be invisible to an unaided human eye under normal conditions. The taggant is formed in the first plastic, not as a coating or as imbedded wires.

Furthermore it is interpreted by the examiner that the distribution of taggants mapped in the object is considered an image, a map of how the taggants are dispersed through the object or item.

6. Regarding claims 8 and 11, the reference Hoshino discloses a method for checking the authenticity of an object. The object is fabricated or made by a base material with a distribution of taggants in the base material itself, where it is randomly distributed in the base material and then is mapped in an article in a scanning region of the object. Information corresponding to the distribution of the taggants in the scanning region and other factors is enciphered and recorded in a code indicator section by

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means of a processing machine. The code indicator section is optically readable such as a bar code which is considered by the examiner to be a registration feature. Once the processing apparatus checks for the authenticity of the object by mapping the location of the taggants on the object of interest, the code that is produced is compared with data for the detection signal by means of a comparator. When the code and the data agree with each other, this concludes that the object is authentic. As seen in Figure 28 and 29, where the authentication method is used in an issuing process such as a ticket and then repayment of the ticket, the post positions numbers are entered, correlate the post positions to the distribution of the magnetic polymers, print the post positions chosen and print a barcode associated with magnetic polymer elements. When the scanning section of object is scanned at a later time for the magnetic polymer elements, an analog signal particular to the ticket is obtained. When the analog signal is obtained and compressed to a digital signal that relates to a particular barcode, the ticket can then be checked for its authenticity (see Figure 19 and 28-29, column 3, lines 6-17, 27-34, 47-column 4, line 2, column 4, lines 20-43, column 8, lines 24-39, column 13, lines 16-40, column 17, line 47-column 18, line 39).

7. It is interpreted by the examiner that the taggant that is formed in the base material as seen in Figure 8, the taggant is combined with a first plastic, where the taggant is incorporated together with the base material, to form a tagged plastic and then molding the article from the tagged plastic to a second plastic through extrusion, is considered to be invisible to an unaided human eye under normal conditions. The taggant is formed in the first plastic, not as a coating or as imbedded wires.

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Furthermore it is interpreted by the examiner that the marking on the item is the barcode associated with the distribution of the magnetic polymers and the printed barcode.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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11. Claims 5 and 6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hoshino.

12. Regarding claim 5, the reference Hoshino discloses the claimed invention except for specifically disclosing the method is tolerant to errors. Hoshino discloses in the method for checking the authenticity of an object, the specified scanning region to detect the distribution of taggants in an object is scanned while the object is moving (see Figure 11, step S2). This step of scanning the object for the distribution of particles while the object is moving is considered by the examiner to be tolerant to errors. The step of scanning the objects for the distribution of particles does not need to be in a stationary position, but rather it is scanned while it is moving, which indicates there is error associated with the process. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method to be tolerant to error so that upon the detection of the distribution of the random taggants, the verification of the object can still be checked for authenticity even though the distribution may not be an exact match upon comparison.

13. Regarding claim 6, the reference Hoshino discloses the claimed invention except for specifically storing the data in RAM. Hoshino discloses the detection of the taggants distribution data may be stored in a memory of a host computer (see column 4, lines 32-42). It is known in the art that RAM is an old and well known form of computer data storage. It would have been obvious to one having ordinary skill in the art at the time the invention was made to verify the data stored in RAM so that the data that is stored

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and then compared with to verify the authenticity of an object can be quickly accessed and confirmed.

14. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoshino as applied to claim 1 above, and further in view of USP 5,619,025 to Hickman et al (submitted on the Information Disclosure Statement on 22 April 2004; herein referred 'Hickman').

15. Regarding claim 2, the reference Hoshino discloses the claimed invention except for where the item is printed with a liquid, such as a printing ink and a taggant. Hoshino discloses the taggant to be mixed in with the base material such as woo pulp fibers and fibrous magnetic polymer elements incorporated into the base material of the object for authentication (see column 3, lines 7-12). Hickman discloses a method for document verification where an object that is to be verified may include an alphanumeric indicia and a magnetic stripe that is formed by mixing the crystals within a carrier liquid and printing, spraying or painting or applied to the carrier document (see abstract, column1, line 60-column 2, line 41, column 3, line 47-column 4, line 64). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the item to be verified to be printed with a liquid containing a printing ink and a taggant, so that the taggant to be detected can be placed in a specified desired location and so that the taggant is not in the material of the item but on a superficial location that can be easily moved or changed if desired.

16. Claims 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoshino, and further in view of USP 4,218,674 to Brosow et al (herein referred Brosow).

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17. Regarding claims 7 and 10, the reference Hoshino discloses a method for checking the authenticity of an object. The object is fabricated or made by a base material with a distribution of taggants in the base material itself, where it is randomly distributed in the base material and then is mapped in an article in a scanning region of the object. Information corresponding to the distribution of the taggants in the scanning region and other factors is enciphered and recorded in a code indicator section by means of a processing machine. The code indicator section is optically readable such as a bar code which is considered by the examiner to be a registration feature. Once the processing apparatus checks for the authenticity of the object by mapping the location of the taggants on the object of interest, the code that is produced is compared with data for the detection signal by means of a comparator. When the code and the data agree with each other, this concludes that the object is authentic (see Figure 19, column 3, lines 6-17, 27-34, 47-column 4, line 2, column 4, lines 20-43, column 8, lines 24-39, column 13, lines 16-40).

18. It is interpreted by the examiner that the taggant that is formed in the base material as seen in Figure 8, the taggant is combined with a first plastic, where the taggant is incorporated together with the base material, to form a tagged plastic and then molding the article from the tagged plastic to a second plastic through extrusion, is considered to be invisible to an unaided human eye under normal conditions. The taggant is formed in the first plastic, not as a coating or as imbedded wires.

19. Hoshino does not disclose the taggant to be fluorescent. Brosow discloses a method for verifying authenticity of an object where random imperfections in or on the

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base material of the object is measured and in a predetermined surface. The random imperfections are measured and converted into pulses which are then registered to a binary code, in which the binary code is compared with a previously stored binary code of the same object, whereby the function is released if the binary codes are identical the object is verified. The base material may be objects such as passports, driver's licenses and credit cards, to which are added are particles that may have fluorescent particles (see column 4, line 62-column 5, line 10). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the taggants to be of a fluorescent material so that when verifying the object, the taggant is not visible to the human eye and can be only seen under a particular wavelength and when illuminated, it will not be mistaken for other particles or erroneous debris stuck to the item.

20. Claims 12, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoshino, as applied to claims 1, 8 and 9, and further in view of USP 6,549,131 to Cote et al (herein referred 'Cote').

21. Regarding claims 12, 14, and 15, the reference Hoshino discloses the claimed invention except for where the taggant is subjected to a source of radiation. Cote discloses a method for covering, embedding or burying magnetically encodable regions invisible to the naked eye in which the taggant in substrate includes a frequency shifting additive, where when excitation radiation having a predetermined excitation frequency excites the frequency shifting additive, the additive will emit radiation having a different predetermined emitted frequency (see abstract, column 6, line 11-40).

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22. It would have been obvious to one having ordinary skill in the art to modify the taggant to react to a source of radiation so that upon verification the object can be authenticated at only specific excitation/emitted frequencies, minimizing the false positives of the object or document.

23. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoshino in view of Brosow, as applied to claim 7, and further in view of Cote.

24. Regarding claim 13, the reference Hoshino discloses the claimed invention except for where the taggant is subjected to a source of radiation. Cote discloses a method for covering, embedding or burying magnetically encodable regions invisible to the naked eye in which the taggant in substrate includes a frequency shifting additive, where when excitation radiation having a predetermined excitation frequency excites the frequency shifting additive, the additive will emit radiation having a different predetermined emitted frequency (see abstract, column 6, line 11-40).

25. It would have been obvious to one having ordinary skill in the art to modify the taggant to react to a source of radiation so that upon verification the object can be authenticated at only specific excitation/emitted frequencies, minimizing the false positives of the object or document.

Conclusion

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USP 5,601,931 to Hoshino et al.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTINE T. MUI whose telephone number is (571)270-3243. The examiner can normally be reached on Monday-Thursday 7-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on (571) 272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CTM

/Walter D. Griffin/
Supervisory Patent Examiner, Art Unit 1797